

## PREMATURE OBSOLESCENCE

# PREMATURE OBSOLESCENCE

In Search of an Improved  
Legal Framework

Anaïs MICHEL

 INTERSENTIA

Cambridge – Antwerp – Chicago

Intersentia Ltd  
8 Wellington Mews | Wellington Street  
Cambridge | CB1 1HW | United Kingdom  
Tel.: +44 1223 736 170  
Email: mail@intersentia.co.uk  
www.larcier-intersentia.com

*Distribution for the UK and the rest of the world (incl. Eastern Europe):*

NBN International  
1 Deltic Avenue, Rooksley  
Milton Keynes MK13 8LD  
United Kingdom  
Tel.: +44 1752 202 301 | Fax: +44 1752 202 331  
Email: orders@nbninternational.com

*Distribution for Europe:*

Lefebvre Sarrut Belgium NV  
Hoogstraat 139/6  
1000 Brussels  
Belgium  
Tel.: +32 3 680 15 50 | Fax: +32 3 658 71 21  
Email: mail@intersentia.be

*Distribution for the USA and Canada:*

Independent Publishers Group  
Order Department  
814 North Franklin Street  
Chicago, IL60610  
USA  
Tel.: +1 800 888 4741 (toll free) | Fax: +1312 337 5985  
Email: orders@ipgbook.com

Premature Obsolescence. In Search of an  
Improved Legal Framework

© Anaïs Michel 2023

The author has asserted the right under the Copyright, Designs and Patents Act 1988, to be identified as author of this work.

No part of this book may be reproduced, stored in a retrieval system, or transmitted, in any form, or by any means, without prior written permission from Intersentia, or as expressly permitted by law or under the terms agreed with the appropriate reprographic rights organisation. Enquiries concerning reproduction which may not be covered by the above should be addressed to Intersentia at the address above.

Cover design: Danny Juchtmans / [www.dsigngraphics.be](http://www.dsigngraphics.be)

Cover image: EDUIN / pixabay

ISBN 978-1-83970-375-1 (hardcover)

ISBN 978-1-83970-379-9 (PDF)

D/2023/7849/73

NUR 822

British Library Cataloguing in Publication Data. A catalogue record for this book is available from the British Library.

# TABLE OF CONTENTS

<i>Acknowledgements</i> .....	xiii
<b>Introduction</b> .....	1
A. Definition of the problem .....	1
1. The phenomenon of premature obsolescence .....	1
2. Types of premature obsolescence .....	2
3. Is premature obsolescence always a problem? .....	3
4. Growing interest in premature obsolescence .....	5
5. A fragmented legal framework .....	8
B. Objectives and research questions .....	10
C. Methodology .....	12
1. Preliminary remarks .....	12
2. First sub-question: a literature review .....	13
3. Second sub-question: an analysis of the legal framework .....	14
4. Third sub-question: an evaluation of the legal framework and policy recommendations .....	19
D. Theoretical importance and societal impact .....	21
E. Delineation of the scope of the research .....	23
<b>Chapter I.</b>	
<b>From Planned to Premature Obsolescence: Concepts and Definitions</b> .....	29
A. Introduction .....	29
B. The (inappropriate) concept of planned obsolescence .....	30
1. Emergence of the concept .....	30
2. Revival of interest due to environmental concerns .....	34
3. Growing interest beyond academia .....	41
4. Increasing attention of policymakers at EU and national levels. ....	46
a) Emergence of the concept at EU level .....	47
b) Emergence of the concept at national level .....	51
(1) French legislation on ‘planned obsolescence’ .....	51
(2) Belgian legislative proposals related to planned obsolescence .....	54
(3) German initiatives against planned obsolescence .....	56
5. Criticism of the concept of planned obsolescence .....	58
a) The definition of planned obsolescence .....	58

b)	A biased and restrictive concept . . . . .	59
c)	Negative impacts of the concept . . . . .	61
d)	The need for a neutral and general concept . . . . .	64
C.	The concepts of product lifetime and premature obsolescence . . . . .	65
1.	The concept of product lifetime (and related concepts) . . . . .	65
2.	The concept of premature obsolescence . . . . .	69
a)	The definition of premature obsolescence . . . . .	69
b)	Types of premature obsolescence . . . . .	71
(1)	The choice of typology . . . . .	71
(2)	Material obsolescence . . . . .	72
(3)	Functional obsolescence . . . . .	75
(4)	Indirect obsolescence . . . . .	80
(5)	Economic obsolescence . . . . .	82
(6)	Psychological obsolescence . . . . .	84
c)	Causes of premature obsolescence . . . . .	87
(1)	On the business side . . . . .	87
(2)	On the consumer side . . . . .	92
D.	Resisting, postponing and reversing premature obsolescence: relevant concepts . . . . .	101
1.	Strategies against premature obsolescence and associated concepts	101
2.	Resisting obsolescence through durability . . . . .	102
3.	Postponing obsolescence through maintenance and upgrades . . . . .	104
4.	Reversing obsolescence through direct reuse, repair, refurbishment and remanufacturing . . . . .	106
5.	Reducing product environmental impacts through recycling . . . . .	110
E.	Conclusion . . . . .	112

## Chapter II.

### The Design and Production Stage: Shaping the Design of Products

#### towards more Sustainability . . . . . 115

A.	Introduction . . . . .	115
B.	Mapping keys elements of product ecodesign . . . . .	116
1.	Product design trends and their impacts on product lifetime . . . . .	116
2.	Tackling premature obsolescence through product ecodesign . . . . .	118
C.	Ecodesign rules, with a particular focus on the Ecodesign Directive . . . . .	124
1.	Product-specific requirements that products must meet to circulate on the EU market . . . . .	124
2.	Existing and future product categories covered by ecodesign rules	127
a)	A scope confined to new or imported energy-related products	127
b)	The possible and upcoming extension of the scope to non- energy-related products . . . . .	130
c)	Extending the scope to products refurbished within the EU? . . . . .	133

d)	A wide range of possible implementing measures-to-be . . . . .	134
e)	The (too strict) criteria for the development of new implementing measures. . . . .	143
f)	The recognised place of self-regulation . . . . .	149
3.	Ecodesign requirements between past and future . . . . .	152
a)	The development of ecodesign requirements for eligible products . . . . .	152
b)	The end result: ecodesign requirements and advanced benchmarks . . . . .	158
c)	An initial focus on energy efficiency requirements. . . . .	160
d)	Requirements on durability. . . . .	166
(1)	De lege lata . . . . .	166
(2)	De lege ferenda. . . . .	169
e)	Requirements on operating system, software and firmware . . .	178
(1)	De lege lata . . . . .	178
(2)	De lege ferenda. . . . .	181
f)	Requirements on reparability and upgradability. . . . .	184
(1)	De lege lata . . . . .	184
(2)	De lege ferenda. . . . .	192
g)	Requirements on reuse, refurbishment and remanufacturing .	199
(1)	De lege lata . . . . .	199
(2)	De lege ferenda. . . . .	201
h)	Requirements on other environmental aspects, including recyclability . . . . .	205
(1)	De lege lata . . . . .	205
(2)	De lege ferenda. . . . .	207
4.	The necessary compliance with and enforcement of ecodesign requirements . . . . .	208
a)	Conforming and proving the conformity. . . . .	208
b)	Products that are presumed to be compliant . . . . .	210
c)	The difficult task of verifying compliance. . . . .	214
d)	Sanctions in case of non-compliance. . . . .	217
e)	Compliance with self-regulation . . . . .	220
D.	Conclusion . . . . .	221

### Chapter III.

	<b>The Marketing and Pre-contractual Stage: Incentivising and Empowering Consumers to make Sustainable Choices at the Time of Purchase . . . . .</b>	<b>227</b>
A.	Introduction . . . . .	227
B.	Mapping key elements of product sustainability information . . . . .	229
1.	Different types of information on product sustainability . . . . .	229

2.	Barriers that hamper the transition towards sustainable consumption patterns . . . . .	231
3.	Tackling premature obsolescence through consumer information . . . . .	233
4.	The challenges of consumer information . . . . .	236
C.	The legislation on unfair commercial practices . . . . .	240
1.	A three-tiered ‘cascade system’ that prohibits unfair commercial practices . . . . .	240
2.	Scope of application and level of harmonisation. . . . .	243
a)	A wide scope of application. . . . .	243
b)	Full harmonisation. . . . .	245
c)	Interplay with other legal instruments . . . . .	248
3.	Blacklisted practices related to premature obsolescence . . . . .	249
a)	Confronting the blacklist with the concept of premature obsolescence. . . . .	250
b)	The French bans on ‘planned obsolescence’ and other related practices. . . . .	254
c)	Belgian legislative proposals on planned obsolescence . . . . .	264
d)	Promoting product sustainability through the UCPD blacklist . . . . .	268
e)	Defining ‘premature obsolescence’ and ‘greenwashing’ in the UCPD and in the Guidance . . . . .	274
4.	Misleading and aggressive practices related to premature obsolescence . . . . .	279
a)	Misleading omissions of material product sustainability information . . . . .	280
(1)	A general duty to disclose material information . . . . .	280
(2)	Misleading omissions through the violations of information requirements contained in EU specific laws. . . . .	288
b)	Misleading actions on product sustainability . . . . .	290
c)	Misleading green claims . . . . .	295
(1)	The obligation to present truthful claims in a specific, accurate and unambiguous manner. . . . .	296
(2)	The obligation to substantiate green claims . . . . .	303
d)	Aggressive practices of premature obsolescence . . . . .	310
5.	The general clause prohibiting unfair commercial practices . . . . .	314
6.	Enforcement and sanctions. . . . .	317
7.	Intermediate conclusion . . . . .	321
D.	Pre-contractual information obligations imposed by the Consumer Rights Directive and national law. . . . .	323
1.	Horizontal information requirements prior to the conclusion of the contract . . . . .	323
2.	Scope of application and level of harmonisation. . . . .	325
a)	A wide scope of application. . . . .	325
b)	A ‘full targeted’ harmonisation . . . . .	327

3.	Obligation to provide information about the main product characteristics . . . . .	329
a)	Existing obligations at EU level . . . . .	329
b)	The French law on the availability of spare parts. . . . .	329
c)	The French information obligation on the environmental qualities and characteristics of products. . . . .	333
d)	Belgian legislative proposals on information requirements on product lifetime, reparability and spare parts availability. . . . .	335
e)	Clarifying information obligations at the EU level. . . . .	336
4.	Obligation to provide information on after-sales services and guarantees . . . . .	343
5.	Obligation to provide information about the functionality, compatibility and interoperability of digital content . . . . .	347
a)	Existing obligations at EU level . . . . .	347
b)	The French mandatory information on updates . . . . .	349
c)	Bringing coherence between the legal instruments . . . . .	350
6.	Enforcement and sanctions. . . . .	354
7.	Intermediate conclusion . . . . .	355
E.	The EU Energy Labelling Rules and the (future) label on product sustainability . . . . .	358
1.	Product-specific mandatory labels displayed at the point of sale. . . . .	358
2.	Scope of application and level of harmonisation. . . . .	360
a)	A scope limited to energy-related products . . . . .	360
b)	A fully harmonised approach . . . . .	365
3.	Existing labelling requirements. . . . .	367
a)	The development of delegated acts. . . . .	367
b)	A main focus on energy efficiency and energy consumption . . . . .	369
c)	Supplementary information on non-energy efficiency aspects. . . . .	372
d)	No existing supplementary information on product sustainability . . . . .	374
4.	Possible future labelling on product sustainability aspects. . . . .	378
a)	Different ways of labelling product sustainability. . . . .	378
b)	Methods for assessing product sustainability aspects. . . . .	382
c)	Drawing inspiration from the French reparability and durability indexes . . . . .	386
5.	Compliance with energy labelling requirements . . . . .	391
a)	Obligation to display accurate and clear information . . . . .	391
b)	Obligation to register in a public database . . . . .	393
c)	Obligation related to updates . . . . .	395
6.	Verification and sanctions . . . . .	396
a)	Verification and sanctions by the market surveillance authorities . . . . .	396



b)	Private law sanctions . . . . .	399
7.	Intermediate conclusion . . . . .	401
F.	The EU Ecolabel Regulation . . . . .	404
1.	Voluntary labels awarded to the most environment-friendly products . . . . .	404
2.	A wide scope of application, with uneven uptake . . . . .	406
3.	Existing EU Ecolabel criteria . . . . .	408
a)	The development of EU Ecolabel criteria . . . . .	408
b)	Existing criteria for product durability . . . . .	411
c)	Existing criteria for product reparability . . . . .	414
d)	Existing criteria on reuse, recycling and end-of-life management . . . . .	417
4.	Possible future EU Ecolabel criteria on product sustainability aspects . . . . .	419
a)	Integrating more criteria on product sustainability . . . . .	419
b)	Drawing inspiration from the German Blue Angel ecolabel . . . . .	420
5.	Award and use of EU Ecolabels, compliance monitoring and sanctions . . . . .	423
6.	Intermediate conclusion . . . . .	424
G.	Conclusion . . . . .	426

## Chapter IV.

### The Use Stage: Extending the Lifetime of Products once Purchased . . . . . 433

A.	Introduction . . . . .	433
B.	Mapping the remedies available to consumers . . . . .	434
1.	Different remedies and their impacts on product lifetime and the environment . . . . .	434
2.	Barriers that hinder the prolonged use of products . . . . .	438
C.	The guarantee rights under consumer sales rules . . . . .	443
1.	Horizontal rules allowing consumers to bring goods into conformity . . . . .	443
2.	Level of harmonization and scope of application . . . . .	446
a)	A directive of maximum but targeted harmonisation . . . . .	446
(1)	The choice for maximum harmonisation . . . . .	446
(2)	Exceptions to maximum harmonisation . . . . .	448
b)	Scope of application . . . . .	450
(1)	Personal scope . . . . .	450
(2)	Material scope . . . . .	452
3.	Seller liability conditions for legal guarantee . . . . .	458
a)	A lack of conformity . . . . .	458
(1)	Subjective requirements . . . . .	459
(2)	Objective requirements . . . . .	463

(3) Conformity requirement related to the installation of the goods . . . . .	473
(4) A liability period of (at least) two years . . . . .	473
(5) Burden of proof and obligation on consumers to notify . . . . .	481
(6) Exceptions to seller's liability . . . . .	485
b) Within two years of the delivery . . . . .	488
(1) A liability period of (at least) two years . . . . .	489
(2) Longer guarantee period for goods with digital elements . . . . .	496
(3) A possible reduced liability period for second-hand goods . . . . .	497
(4) Suspension and interruption of the liability period . . . . .	501
(5) Burden of proof . . . . .	504
(6) Exceptions to the two-year guarantee period . . . . .	505
c) Prior to the delivery of the good . . . . .	506
(1) A defect existing prior to the delivery of the good . . . . .	506
(2) A presumption period of one year . . . . .	507
(3) Exceptions to the presumption period . . . . .	512
4. Consumer remedies . . . . .	513
a) A right to repair . . . . .	515
(1) Repair as primary remedy . . . . .	515
(2) Restrictions to the right to repair . . . . .	518
(a) When repair is impossible . . . . .	519
(b) When repair is disproportionate . . . . .	521
(3) Repair modalities . . . . .	525
(a) Free of charge . . . . .	525
(b) A reasonable period of time . . . . .	527
(c) No significant inconvenience . . . . .	531
(d) Supplementary repair modalities . . . . .	533
b) Other (less sustainable) remedies . . . . .	535
(1) Replacement . . . . .	536
(2) Subsidiary remedies . . . . .	540
(3) Extra remedies, including the right to reject . . . . .	544
5. Right of redress and producer liability . . . . .	546
a) Seller's remedies . . . . .	546
b) Direct producer liability . . . . .	548
6. Commercial guarantees . . . . .	553
a) The (unexploited) potential of commercial guarantees against premature obsolescence . . . . .	553
b) Scope of application . . . . .	555
c) Liability period . . . . .	556
d) Burden of proof . . . . .	558
e) Consumer remedies . . . . .	559
f) Guarantor liability . . . . .	561

g)	The need for a more developed legal framework . . . . .	563
7.	Information on legal and commercial guarantees . . . . .	565
a)	Lack of knowledge of guarantee rights . . . . .	566
b)	Information obligations under the Sale of Goods Directive . . .	567
c)	Possible amendments to improve consumer information . . . .	569
8.	Liability beyond legal and commercial guarantees. . . . .	573
a)	Guarantee against hidden defects . . . . .	573
b)	The lack of consent under the general sales legislation. . . . .	578
c)	Other non-legal remedies . . . . .	580
D.	Conclusion . . . . .	585

## Chapter V.

### **The End-of-Life Stage: Preventing Products from Becoming Waste and Reducing their Environmental Impacts once they are . . . . .**

A.	Introduction . . . . .	593
B.	Mapping key elements of product's end-of-life stage. . . . .	594
1.	Sustainable and less sustainable scenarios at the end-of-life stage. .	594
2.	Barriers that hinder reversing product obsolescence . . . . .	597
C.	EU waste rules and national initiatives . . . . .	598
1.	A framework legislation, three main sector-specific directives and a wide room for manoeuvre for the Member States . . . . .	598
2.	Scope of application and level of harmonisation. . . . .	601
3.	A hierarchy ranking waste prevention and management options . .	608
4.	The extended producer responsibility. . . . .	621
5.	Specific obligations established by sectoral waste rules . . . . .	629
D.	Conclusion . . . . .	636

## Chapter VI.

### **General Conclusion and Policy Recommendations. . . . .**

<i>Selected Bibliography</i> . . . . .	653
--	-----

# ACKNOWLEDGEMENTS

*“All that is gold does not glitter,  
Not all those who wander are lost (...)”*

– J.R.R. Tolkien

Writing a doctoral thesis is an adventure that I never thought I would embark on. It all started thanks to a collaborative project between two prestigious Belgian universities: UCLouvain, where I obtained the degree of Master in Law and which nurtured a true passion for law, and KU Leuven, which gave me the key skills to thrive in this discipline. In addition to these two universities, I am especially grateful to the Research Foundation Flanders (FWO), which funded my research.

During this adventure, I realised that far from being a tough and lonely task, writing a PhD thesis is a tremendous opportunity to meet and strengthen ties with amazing and inspiring people. I have had the companionship of many wonderful people on the journey that has resulted in this book. Although words are not enough to express my gratitude, the following paragraphs aim to acknowledge all the brilliant minds that contributed to this outcome.

My first word of thanks goes to my supervisor, Prof. Dr. Bert Keirsbilck, who instilled in me his passion for law and brought out the best in me. I could always count on him to critically review every page I sent him (down to the smallest comma) and to involve me in all the projects he deemed beneficial for my research. In addition to sharing his experience and his expertise in economic law and other disciplines, he taught me one of the most beautiful life lessons: with rigor, perseverance, and self-confidence, anything is possible. My co-supervisor, Prof. Dr. Anne-Lise Sibony, also greatly contributed to the completion of this project. I thank her for her insightful comments and thorny questions that helped me refine the text of this book, as well as for the continuous kindness and support she gave me. Thank you both for the valuable time you set aside for me.

I appreciate the willingness of Prof. Dr. Evelyne Terryn and Prof. Dr. Geert Van Calster to be members of my supervisory committee and PhD jury. Many thanks for your assistance through every step of my research project, as well as for all the side projects and opportunities you gave me. I would also like to thank Prof. Dr. Alain Strowel, who believed in the project from the very start and agreed to be a

member of my PhD jury. Thank you to Prof. Dr. Vanessa Mak, another member of my PhD jury, for her substantial contribution to the better understanding and further development of civil law and for providing me with food for thought on a wide array of topics discussed in this book. I am also very grateful to Prof. Dr. Bernard Tilleman, for having agreed to preside over my PhD defence. Thank you for all the support that you have given me throughout the journey and, more generally, for initiating these very symbolic projects jointly supervised by KU Leuven and UCLouvain. In addition, I wish to acknowledge Prof. Dr. Yves De Cordt, without whom this amazing adventure would not have started, and Dr. Christophe Verdure, who was a member of my supervisory committee as well as a sympathetic ear during these six years of doctoral studies and thanks to whom I became the editorial secretary of the DCCR journal, another project dear to my heart. I also owe a debt of gratitude to all the professors and scholars who crossed my path during my PhD and who, through their wise words, writings, advice and criticism, have fuelled my thoughts.

Also very importantly, I would like to thank all my colleagues who made this journey easier and funnier. My first thanks go to those who witnessed and guided my first steps at the KU Leuven and helped me discover the rich and diverse Flemish culture: Eveline Vanthorre, Charline De Coster, Stijn Aerts, Jonas Lambrechts and Dorien De Wachter. Thank you to all the members of the Consumer Competition Market (CCM) for their support, advice, and good cheer, with special thanks to Harry Slachmuylders, Elisa Paredis, Elias Van Gool, Lennard Michaux, Christof Koolen, Zeno Vanhoyland and Dario Hug, who proofread this work. I have also learned a lot from Jozefien Vanherpe, Friso Bostoën, Pim Jansen and Richard Steppe, who were true models and great coaches. I was equally delighted to share this journey with the members of the Centre de recherche interdisciplinaire Droit, Entreprise et Société (CRIDES) and the Centre Charles De Visscher pour le droit international et européen (CeDIE) who welcomed me with open arms in these excellent forums, where I had fruitful and pleasant discussions. A sincere word of thanks also goes to my new colleagues at the FPS Economy, who encouraged me during the final leg of this journey.

I also feel extremely lucky to be surrounded by all these people that I get to call friends, who I met at school, during my studies, in Brussels or elsewhere. Though for lack of space, I cannot name you all, I hope you realise how important you are in my life. Your kindness kept me motivated along the way. So, from the bottom of my heart, thank you.

My heartfelt thanks go out to my family. Cyril, Lison and Merlin, as the older sister, I have always tried to set a good example for you, but I have realised that in the end you are the ones who impact and inspire me the most. I am immensely

proud of you. I would also like to express my deep gratitude to my parents. Your encouragement, trust, and unconditional love have allowed me to overcome challenges and fully realise myself. I know I can count on you in any situation, and this provides me with an invaluable sense of security and confidence. A huge thank to Émilie, Freddy, Marisa and Alister, who are just as supportive as my parents. I also truly appreciated the unwavering support I received from the rest of my family.

Most of all, I would like to thank the man who changed my life, my best friend, the love of my life, Jack. Since you became a part of my life, I have been filled with indescribable happiness. Thank you for your unfailing support and patience. I cannot wait to see what the future holds for us.

